- (6) If a vest fails the buoyancy test, the sample from the next succeeding lot must consist of 10 specimen vests or more to be tested for buoyancy in accordance with paragraph (e) of this section.
- (7) The manufacturer shall keep on file and make available to the laboratory inspector and Coast Guard inspector the records of inspections and tests, together with affidavits concerning the material.
- (c) Additional compliance tests. An inspector from the recognized laboratory or Coast Guard may conduct an examination, test and inspection of a buoyant device that is obtained from the manufacturer or through commercial channels to determine the suitability of the device for listing and labeling or to determine its conformance to applicable requirements.
- (d) Test facilities. The manufacturer shall admit the laboratory inspector and the Coast Guard inspector to any part of the premises at the place of manufacture of a listed and labeled device to—
- (1) Examine, inspect, or test a sample of a part or a material that is included in the construction of the device; and
- (2) Conduct any necessary examination, inspection, or test in a suitable place and with appropriate apparatus provided by the manufacturer.
- (e) Buoyancy—(1) Buoyancy test method. Remove the buoyant inserts from the vests. Securely attach the spring scale in a position directly over the test tank. Suspend the weighted wire basket from the scale in such a manner that the basket can be weighed while it is completely under water. In order to measure the actual buoyancy provided by the inserts, the underwater weight of the empty basket should exceed the buoyancy of the inserts. To obtan the buoyancy of the inserts, proceed as follows:
- (i) Weigh the empty wire basket under water.
- (ii) Place the inserts inside the basket and submerge it so that the top of the basket is at least 2 inches below the surface of the water. Allow the inserts to remain submerged for 24 hours. The tank shall be locked or sealed during this 24-hour submergence period. It is important that after the inserts have

- once been submerged they shall remain submerged for the duration of the test, and at no time during the course of the test shall they be removed from the tank or otherwise exposed to air.
- (iii) After the 24-hour submergence period, unlock or unseal the tank and weigh the wire basket with the inserts inside while both are still under water.
- (iv) The buoyancy is computed as paragraph (e)(1)(i) of this section minus paragraph (e)(i)(iii) of this section.
- (2) Buoyancy required. The buoyant inserts from adult size buoyant vests shall provide not less than 15½ pounds buoyancy in fresh water; the inserts from child medium size vests shall provide not less than 11 pounds buoyancy; and the inserts from child small size vests shall provide not less than 7 pounds buoyancy.
- (f) Body strap test. The complete body strap assembly including hardware, shall be tested for strength by attaching the dee ring to a suitable support such that the assembly hangs vertically its full length. A weight as specified in §160.052–3(d) shall be attached to the other end of the snap hook for 10 minutes. The specified weight shall not break or excessively distort the body strap assembly.
- (g) Additional approval tests for nonstandard vests. Tests in addition to those required by this section may be conducted by the inspector for nonstandard vests to determine performance equivalence to a standard vest. Such additional tests may include determining performance in water, suitability of materials, donning time, ease of adjustment, and similar equivalency tests. Costs of any additional tests must be assumed by the manufacturer.

[CGFR 65-37, 30 FR 11588, Sept. 10, 1965, as amended by CGD 72-90R, 37 FR 10837, May 31, 1972; CGD 72-163R, 38 FR 8120, Mar. 28, 1973; CGD 75-008, 43 FR 9772, Mar. 9, 1978]

## § 160.052-8 Marking.

(a) Each buoyant vest must have the following information clearly marked in waterproof lettering that can be read at a distance of 2 feet:

Type II—Personal flotation device.

Inspected and tested in accordance with U.S.

Coast Guard regulations.

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(Name of buoyant material) provides a minimum buoyant force of (15½ lb., 11 lb., or 7 lb.).

Dry out thoroughly when wet.

Approved for use on all recreational boats and on uninspected commercial vessels less than 40 feet in length not carrying passengers for hire by persons weighing (over 90 lb., 50 to 90 lb., or less than 50 lb.).

U.S. Coast Guard Approval No. 160.050/(assigned manufacturer's No.)/(Revision No.); (Model No.).

(Name and address of manufacturer or distributor).

(Lot No.)

(b) Waterproof marking. Marking for buoyant vests shall be sufficiently waterproof so that after 72 hours submergence in water it will withstand vigorous rubbing by hand while wet without the printed matter becoming illegible

[CGD 72–163R, 38 FR 8120, Mar. 28, 1973, as amended by CGD 75–008, 43 FR 9771, Mar. 9, 1978]

### § 160.052-9 Recognized laboratory.

(a) A manufacturer seeking Coast Guard approval of a product under this subpart shall follow the approval procedures of subpart 159.005 of this chapter, and shall apply for approval directly to a recognized independent laboratory. The following laboratories are recognized under §159.010–7 of this part, to perform testing and approval functions under this subpart:

Underwriters Laboratories, 12 Laboratory Drive, P.O. Box 13995, Research Triangle Park, NC 27709-3995, (919) 549-1400.

(b) Production oversight must be performed by the same laboratory that performs the approval tests unless, as determined by the Commandant, the employees of the laboratory performing production oversight receive training and support equal to that of the laboratory that performed the approval testing.

[CGD 93-055, 61 FR 13930, Mar. 28, 1996]

## Subpart 160.053—Work Vests, Unicellular Plastic Foam

SOURCE: CGFR 59-22, 24 FR 4961, June 18, 1959, unless otherwise noted.

#### § 160.053-1 Applicable specifications.

- (a) Specification. The following specification of the issue in effect on the date unicellular plastic foam work vests are manufactured, form a part of this subpart:
- (1) Military specification: MIL-L-17653A—Life Preserver, Vest, Work Type, Unicellular Plastic.

(2) [Reserved]

(b) Copies on file. Copies of the specification referred to in this section, as well as the various specifications forming a part thereof, shall be kept on file by the manufacturer, together with the certificate of approval. They shall be kept for a period consisting of the duration of approval and 6 months after termination of approval. Federal specifications may be purchased from the Business Service Center, General Services Administration, Washington, DC 20407. Military specifications may be obtained from the Commanding Officer, Naval Supply Depot, 5801 Tabor Avenue, Philadelphia, Pa. 19120.

[CGFR 59–22, 24 FR 4961, June 18, 1959, as amended by CGFR 65–16, 30 FR 10899 Aug. 21, 1965; CGD 72–163, 38 FR 8120, Mar. 28, 1973; CGD 78–012, 43 FR 27154, June 22, 1978; CGD 95–028, 62 FR 51215, Sept. 30, 1997]

## § 160.053-2 Type.

(a) Unicellular plastic foam work vests specified by this subpart shall be of the type described in Military Specification MIL-L-17653A, but alternate designs equivalent in materials, construction, performance, and workmanship will be given consideration.

(b) [Reserved]

# § 160.053-3 Materials, construction and workmanship.

(a) General. Except as otherwise specifically provided by this subpart and subparts 164.019 and 164.023 of this chapter, the materials, construction, and workmanship of unicellular plastic foam work vests specified by this subpart shall conform to the requirements of Military Specification MIL-L-17653A.

(b) Color of envelope. Indian Orange, Cable No. 70072, Standard Color Card of America, will be acceptable in lieu of the Scarlet-Munsell 7.5 red % color specified for envelopes or covers by paragraph 3.1.1.1 of Specification MIL-L-17653A.